No. 8200167

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Pure Seed Testing

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF eighteen YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT (S[illegible] 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

TALL FESCUE

'Jaguar'

In Testimony Whereof, *I have hereunto set my hand and caused the seal of the* Plant Variety Protection Office *to be affixed at the City of* Washington *this* 28th *day of* February *in the year of our Lord one thousand nine hundred and* eighty-three.

Attest:

Kenneth J. Evans
Acting Commissioner
Plant Variety Protection Office
Grain Division
Agricultural Marketing Service

John R Block
Secretary of Agriculture

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
LIVESTOCK, POULTRY, GRAIN & SEED DIVISION

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

INSTRUCTIONS: *See Reverse.*

FORM APPROVED
OMB NO. 40-R3822

No certificate for plant variety protection may be issued unless a completed application form has been received (5 U.S.C. 553).

1a. TEMPORARY DESIGNATION OF VARIETY	1b. VARIETY NAME	FOR OFFICIAL USE ONLY
572	Jaguar	PV NUMBER 8200167
2. KIND NAME: Tall fescue	3. GENUS AND SPECIES NAME: Festuca arundinacea	FILING DATE 8/24/82 / TIME 12:30 P.M.
4. FAMILY NAME (BOTANICAL): Gramineae	5. DATE OF DETERMINATION: August, 1981	FEE RECEIVED $ 500.00 $ 250.00 / DATE 8/24/82 1/27/83
6. NAME OF APPLICANT(S): Pure-Seed Testing	7. ADDRESS (*Street and No. or R.F.D. No., City, State, and ZIP Code*): P. O. Box 449, 73 West G Street Hubbard, OR 97032	8. TELEPHONE AREA CODE AND NUMBER: 503-981-7333

9. IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF ORGANIZATION: (*Corporation, partnership, association, etc.*)	10. IF INCORPORATED, GIVE STATE AND DATE OF INCORPORATION	11. DATE OF INCORPORATION
Corporation	Oregon	June 3, 1974

12. NAME AND MAILING ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS:

William A. Meyer, Pure-Seed Testing
P. O. Box 449
Hubbard, OR 97032

13. CHECK BOX BELOW FOR EACH ATTACHMENT SUBMITTED:

- [X] 13A. Exhibit A, Origin and Breeding History of the Variety *(See Section 52 of the Plant Variety Protection Act.)*
- [X] 13B. Exhibit B, Novelty Statement.
- [X] 13C. Exhibit C, Objective Description of the Variety *(Request form from Plant Variety Protection Office.)*
- [X] 13D. Exhibit D, Additional Description of the Variety.

14a. DOES THE APPLICANT(S) SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED? *(See Section 83(a). (If "Yes," answer 14B and 14C below.)* [ ] YES [X] NO

14b. DOES THE APPLICANT(S) SPECIFY THAT THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS?	14c. IF "YES," TO 14B, HOW MANY GENERATIONS OF PRODUCTION BEYOND BREEDER SEED?
[X] YES [ ] NO	[X] FOUNDATION [ ] REGISTERED [X] CERTIFIED

15a. DID THE APPLICANT(S) FILE FOR PROTECTION OF THIS VARIETY IN OTHER COUNTRIES? [ ] YES [X] NO *(If "Yes," give name of countries and dates.)*

15b. HAVE RIGHTS BEEN GRANTED THIS VARIETY IN OTHER COUNTRIES? [ ] YES [X] NO *(If "Yes," give name of countries and dates.)*

16. DOES THE APPLICANT(S) AGREE TO THE PUBLICATION OF HIS/HER (THEIR) NAME(S) AND ADDRESS IN THE OFFICIAL JOURNAL? [X] YES [ ] NO

17. The applicant(s) declare(s) that a viable sample of basic seed of this variety will be furnished with the application and will be replenished upon request in accordance with such regulations as may be applicable.

The undersigned applicant(s) is (are) the owner(s) of this sexually reproduced novel plant variety, and believe(s) that the variety is distinct, uniform, and stable as required in Section 41, and is entitled to protection under the provisions of Section 42 of the Plant Variety Act.

Applicant(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.

8/20/82
(DATE)

William A. Meyer
(SIGNATURE OF APPLICANT)

(DATE)

(SIGNATURE OF APPLICANT)

FORM GR-470 (1-78)

EXHIBIT A.

ORIGIN AND BREEDING HISTORY OF
JAGUAR TALL FESCUE

1. Jaguar (expt. 572) tall fescue is an advanced generation synthetic cultivar derived from the progenies of 12 clones. Plants collected from old turf areas in Alabama, North Carolina, Pennsylvania, and New Jersey contributed to the parental germplasm of Jaguar. Clones were selected from space plant nurseries based on their late maturity, reduced vertical growth, disease resistance, dark color and seed yield. Single plant progenies were evaluated for turf performance.

Fifty clones were chosen as the parents of Jaguar after 3 cycles of phenotypic recurrent selection and two years of evaluation as clones for resistance to crown rust, late maturity, and seed yield.

2. Breeder seed of Jaguar is produced by allowing the 50 parental clones to interpollinate in an isolated nursery. Seed production is limited to 2 generations of increase from breeder seed - one each of foundation and certified.

3. Jaguar is a stable and uniform variety. No off-type plants or variants have been observed in the reproduction or multiplication of Jaguar. Jaguar tall fescue and the parents of Jaguar have all produced turf of good quality and acceptable uniformity.

EXHIBIT B.

NOVELTY STATEMENT ON
JAGUAR TALL FESCUE

Jaguar most closely resembles the variety Rebel tall fescue. However, close comparisons show that the two cultivars differ in the following characteristics:

1. Jaguar has shown better resistance to leaf spot and crown rust. (Table 4, 6).

2. Jaguar is 3-4 days later maturing than Rebel (Table 1.).

3. Jaguar has a darker blue color (RHS 137B) than Rebel (RHS 137D) (Table 7.).

FORM GR-470-37
(3-76)

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
GRAIN DIVISION
HYATTSVILLE, MARYLAND 20782

OBJECTIVE DESCRIPTION OF VARIETY
FESCUE
(Festuca spp.)

NAME OF APPLICANT(S)

Pure-Seed Testing, Inc.

ADDRESS *(Street and No., or R.F.D. No., City, State, and ZIP Code)*

P. O. Box 449, 73 West G Street
Hubbard, Oregon 97032

VARIETY NAME OR TEMPORARY DESIGNATION

Jaguar tall fescue (572)

FOR OFFICIAL USE ONLY

PVPO NUMBER

8200167

Place the appropriate number that describes the varietal character of this variety in the boxes below. Place a zero in first box (e.g. [0][8][9] or [0][9]) when number is either 99 or less or 9 or less. Characteristics described, including numerical measurements, should represent those that are typical for the variety. Ranges may be given also. Measured data should be for SPACED PLANTS. Royal Horticultural Society or any recognized color fan may be used to determine plant colors; designate system used:_____. Describe location of test area_____.
All questions need not be answered, however, completeness should be striven for in order to establish the most adequate Variety Identification.

1. SPECIES: (With comparison varieties for use below - use varieties within species of application variety)

[1]

1 = F. ARUNDINACEA (TALL) 11 = ALTA 12 = FAWN 13 = GOAR 14 = KENTUCKY 31
2 = F. PRATENSIS (MEADOW) 21 = ENSIGN 22 = TRADER
3 = F. RUBRA SSP. COMMUTATA (CHEWINGS) 31 = CASCADE 32 = HIGHLIGHT 33 = JAMESTOWN
4 = F. RUBRA SSP. RUBRA (RED) 41 = BOREAL 42 = PENNLAWN 43 = DAWSON
5 = F. OVINA VAR. OVINA (SHEEP)
6 = F. LONGIFOLIA (HARD) 61 = DURAR 62 = BILJART (C-26) 63 = SCALDIS
7 = OTHER (SPECIFY) F._____

2. CYTOLOGY

[4][2] 2n CHROMOSOME NUMBER

3. ADAPTATION: (0 = Not Tested; 1 = Not Adapted; 2 = Adapted)

[2] NORTHEAST [2] SOUTHEAST [2] Southern part NORTH CENTRAL [2] PACIFIC N.W. [2] OTHER (SPECIFY) California

4. MATURITY: (50% Headed) Give Test Area _____

[ ][ ] DAYS EARLIER THAN . . . . . [ ][ ]
MATURITY SAME AS . . . . . [ ][ ] COMPARISON VARIETY
[1][4] DAYS LATER THAN . . . . . [1][4] Table 1.

5. PLANT HEIGHT: (At maturity to top of panicle)

1 [3][4].4 mm HEIGHT
2 [1].7 mm SHORTER THAN . . . . . [1][4] Table 2.
HEIGHT SAME AS . . . . . [ ][ ] COMPARISON VARIETY
[ ][ ] mm TALLER THAN . . . . . [ ][ ]

6. GROWTH HABIT (Mature)

[2] 1 = ERECT (KENTUCKY 31) 2 = SEMI-ERECT (HIGHLIGHT) 3 = PROSTRATE

7. RHIZOMES

[ ][ ] mm LENGTH [ ][ ] mm WIDTH

[0] 0 = ABSENT 1 = WEAKLY CREEPING (DAWSON) 2 = STRONGLY CREEPING (BOREAL) 3 = OTHER _____

4

8. LEAF BLADE:

[4] COLOR: 1 = LIGHT GREEN (GOLFROOD) 2 = MODERATELY LIGHT GREEN (HIGHLIGHT) 3 = MEDIUM GREEN (JAMESTOWN, KENTUCKY 31)
4 = DARK GREEN (CASCADE) 5 = BLUEGREEN 6 = GRAYGREEN 7 = OTHER(SPECIFY)_____

8. LEAF BLADE:

[ ] ANTHOCYANIN: 0 = ABSENT 1 = PRESENT [ ] HAIRS (BASAL): 0 = ABSENT 1 = PRESENT [2] MARGINS: 1 = SMOOTH 2 = SEMI-ROUGH 3 = ROUGH

[208] mm LENGTH (FIRST LEAF BELOW FLAG LEAF) [3.8] mm WIDTH Table 2.

[72] mm SHORTER THAN . . . . [14] LENGTH SAME AS . . . . . [ ] COMPARISON VARIETY [ ] mm LONGER THAN . . . . [ ]

[4.5] mm NARROWER THAN [14] WIDTH SAME AS . . [ ] COMPARISON VARIETY [ ] mm WIDER THAN . . [ ]

9. LEAF SHEATH (Plant Base):

[ ] COLOR: 1 = WHITE (HIGHLIGHT) 2 = RED [1] AURICLE HAIRINESS: 0 = ABSENT 1 = PRESENT

10. PANICLE (Mature plant)

[57] NUMBER OF PANICLES PER PLANT (FIRST YEAR OF PRODUCTION - FALL OR SPRING PLANTING SPECIFY _____) 5½" row – Table 3.

[230] mm LENGTH [ ] GRAMS OF SEED PER PANICLE

[46] mm SHORTER THAN . . . [14] LENGTH SAME AS . . . [ ] COMPARISON VARIETY [ ] mm LONGER THAN . . . [ ]

[ ] GRAMS LESS SEED THAN [ ] WEIGHT SAME AS . . [ ] COMPARISON VARIETY [ ] GRAMS MORE SEED THAN [ ]

[ ] SHAPE: 1 = NARROW-TAPERING 2 = EGG SHAPE 3 = OBLONG 4 = OTHER (SPECIFY) _____

[1] TYPE: 1 = OPEN 2 = INTERMEDIATE 3 = COMPACT

[2] HABIT: 1 = ERECT 2 = NODDING

[ ] BRANCHES: 1 = SMOOTH 2 = ROUGH

[ ] COLOR (At 50% flowering): 1 = YELLOWISH GREEN 2 = GREEN 3 = BLUISH GREEN 4 = PURPLISH 5 = REDDISH 6 = OTHER (SPECIFY) _____

11. PALEA:

[0] HAIRS (ON KEELS): 0 = ABSENT 1 = SHORT (OLDS) 2 = LONG (RAINIER)

12. LEMMA:

[0] HAIRS: 0 = ABSENT 1 = PRESENT [ ] TEXTURE: 1 = SMOOTH 2 = ROUGH

[ ] mm LEMMA LENGTH [ ] mm LEMMA WIDTH

[ ] mm SHORTER THAN . . . . [ ] LENGTH SAME AS . . . . [ ] COMPARISON VARIETY [ ] mm LONGER THAN . . . . [ ]

[ ] mm NARROWER THAN [ ] WIDTH SAME AS . . . [ ] COMPARISON VARIETY [ ] mm WIDER THAN. . . [ ]

[1] AWNS: 0 = ABSENT 1 = PRESENT

[14] mm AWN LENGTH Table 3.

8200167

12. LEMMA:

mm SHORTER THAN . . .

LENGTH SAME AS . . . . } COMPARISON VARIETY

mm LONGER THAN . . . .

13. SEED:

6 3 mm LENGTH

mm WIDTH

mm SHORTER THAN . . .

LENGTH SAME AS . . . } COMPARISON VARIETY

3 mm LONGER THAN . . 1 4

mm. NARROWER THAN

WIDTH SAME AS . . } COMPARISON VARIETY

3 mm WIDER THAN . . 1 4

2 4 4 7 GRAMS PER 1000 SEED

GRAMS LESS THAN .

WEIGHT SAME AS . . } COMPARISON VARIETY

3 3 2 GRAMS MORE THAN . 1 4

14. DISEASE, INSECT, AND NEMATODE (0 = Not Tested, 1 = Susceptible, 2 = Resistant):

2 HELMINTHOSPORIUM VAGANS	0 H. SOROKINIANUM	2 H. DICTYOIDES
2 RHIZOCTONIA SOLANI	2 ERYSIPHE GRAMINIS	2 USTILAGO STRIIFORMIS
0 FUSARIUM NIVALE	0 F. ROSEUM	0 TYPHULA IOTANA
0 PUCCINIA GRAMINIS	0 P. STRIIFORMIS	0 P. POAE-NEMORALIS
2 P. CORONATA	1 PYTHIUM ULTIMUM	2 CORTICIUM FUSCIFORME
2 SCLEROTINIA HOMEOCARPA	0 INSECT _____	NEMATODE _____
OTHER _____	OTHER _____	OTHER _____

15. GIVE VARIETY OR VARIETIES THAT MOST CLOSELY RESEMBLE THE APPLICATION VARIETY. For the following characteristics indicate degree of resemblance (D.R.) by placing in the column marked, D.R., one of the following numbers:

1 = Application variety is less than comparison variety 2 = Same as

3 = More than, better, greater, darker, more disease resistant, etc.

CHARACTER	VARIETY	D.R.	CHARACTER	VARIETY	D. R.
RHIZOME LENGTH	Rebel	2	GROWTH HABIT	Rebel	2
LEAF WIDTH	Rebel	1	LEAF COLOR	Rebel	3
PANICLE COLOR			PANICLE SHAPE		
WINTER COLOR	Rebel	2	COLD INJURY	Rebel	2
SHADE TOLERANCE	Kentucky 31	3	HEAT		
DROUGHT			DISEASE* Leaf spot	Rebel	3
			crown rust	Rebel	3

(Table 4,6)

*Specify each disease evaluated.

EXHIBIT D.

ADDITIONAL DESCRIPTION OF
JAGUAR TALL FESCUE

Jaguar is an attractive, leafy, turf-type tall fescue with good density, a medium dark green color (Table 7) and a moderately low growth habit. It has shown good heat and drought adaptation, good shade adaptation and very good low temperature color retention in late fall (Table 5). In turf trials in New Jersey, Maryland, California, and Oregon it has had very good turf performance compared to other tall fescues (Table 5). It has very good resistance to leaf spot and brown patch (Table 4, 6).

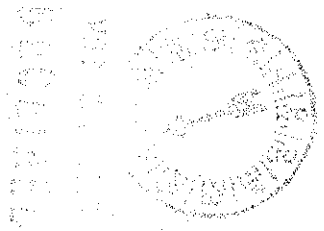

TABLE 1.

HEADING DATES OF TALL FESCUES SEEDED NEAR HUBBARD, OR
ONE TRIAL SEEDED IN THE FALL OF 1980 AND
TWO TRIALS SEEDED IN THE FALL OF 1981.

		50% HEADING DATES		
	FALL, 1980 TRIAL	1981 NORTH TRIAL	1981 SOUTH TRIAL	
	1981	1982	1982	
ENTRY	DATE	DATE	DATE	
Jaguar	5/21	5/22	5/23	5/22
Rebel	5/18	5/18	5/18	5/18
Olympic	5/14	5/15	5/15	5/15
Falcon	5/11	5/13	5/13	5/12
Kentucky 31	5/6	5/9	5/8	5/8

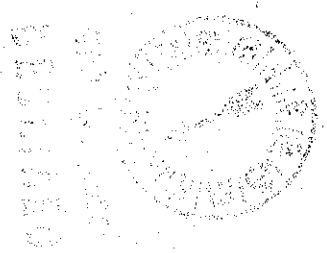

TABLE 2.

MORPHOLLOGICAL MEASUREMENTS JULY, 1982 ON
TALL FESCUE GROWN NEAR HUBBARD, OR
IN SEED YIELD TRIALS SEEDED IN AUGUST, 1981

ENTRY	PLANT HEIGHT CM	STANDARD ERROR OF MEAN	FLAG LEAF LENGTH CM	STANDARD ERROR OR MEAN	FLAG LEAF WIDTH MM	STANDARD ERROR OF MEAN
Jaguar	134.4	0.9	20.8	0.4	3.8	0.2
Rebel	138.0	0.7	17.8	0.4	4.8	0.2
Kentucky 31	156.1	1.4	28.0	0.7	8.3	0.3

TABLE 3.

MORPHOLLOGICAL MEASUREMENTS JULY, 1982 ON
TALL FESCUE GROWN NEAR HUBBARD, OR
IN SEED YIELD TRIALS SEEDED IN AUGUST, 1981

ENTRY	PANICLE LENGTH CM	STANDARD ERROR OF MEAN	# PANICLES 5½" ROW	STANDARD ERROR OF MEAN	AWN LENGTH MM	STANDARD ERROR OF MEAN
Jaguar	23.0	0.5	57	3.4	1.4	0.3
Rebel	21.7	0.5	57	3.4	1.9	0.3
Kentucky 31	27.6	0.6	36	2.2	2.8	0.3

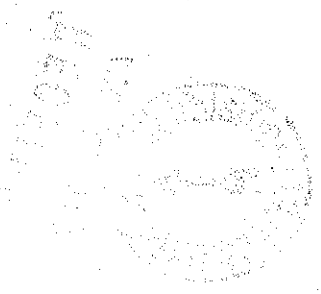

TABLE 4.

DISEASE RATINGS OF TALL FESCUES IN TURF TRIALS
SEEDED FALL, 1980 NEAR HUBBARD, OR AND ADELPHIA, NJ FALL, 1979.
MAINTAINED AT MODERATE FERTILITY

	HUBBARD, OR 9-1 (9=least disease)	ADELPHIA, NJ 9-1 (9=most disease)	
ENTRY	LEAF SPOT 11/19/80	LEAF SPOT 11/79	BROWN PATCH 9/80
Jaguar	7.0	2.8	0.7
Olympic	8.0	2.9	2.1
Falcon	6.3	3.5	1.9
Rebel	6.0	4.7	1.4
Kentucky 31	3.7	6.4	3.0
Alta	2.7		
LSD (0.05)	0.89	1.0	1.3

TABLE 5.

TURF RATINGS OF TALL FESCUES IN TURF TRIALS
SEEDED FALL, 1980 NEAR HUBBARD, OR & BELTSVILLE, MD & ADELPHIA, NJ
MAINTAINED AT MODERATE FERTILITY

	TURF QUALITY 9-1 (9=best)			
	ADELPHIA, NJ		HUBBARD, OR	BELTSVILLE, MD
	1979-1980	1981	1981	1981
ENTRY	AVE.	AVE.	AVE.	AVE.
Jaguar	7.0	7.6	6.6	7.3
Olympic	6.7	6.9	6.6	7.0
Falcon	6.2	6.5	5.9	6.8
Rebel	6.6	7.3	6.5	7.2
Kentucky 31	5.2	5.0	4.0	6.0
LSD (0.05)	0.5	0.5	0.8	

TABLE 6.

CROWN RUST RATINGS OF TALL FESCUES
SEEDED IN YIELD TRIALS NEAR HUBBARD, OR
FALL OF 1979 and 1980.

	9-1 (9=least disease)	
	1979 TEST	1980 TEST
ENTRY	6/23/81	6/23/81
Olympic	9.0	9.0
Jaguar	9.0	9.0
Alta	6.0	6.0
Rebel	5.5	6.0
Kentucky 31	8.0	8.0

TABLE 7.

TURF TRIALS OF TALL FESCUES
SEEDED NEAR HUBBARD, OR FALL, 1979, 1980 & 1981
COLOR RATINGS WITH ROYAL HORT. SOC. CHARTS

ENTRY	1979 TEST 8/81	1980 TEST 8/81	1981 TEST 8/82
Jaguar	137B	137B	137B
Olympic	136B	136B	137A
Falcon	137B	137B	137B
Rebel	137D	137D	137D
Kentucky 31	143A	143A	143A